

DISCOVER



2017 ANNUAL REPORT

DISCOVER







TOGETHER

DEAR FRIENDS:

We say it every year because it's true. The Denver Museum of Nature & Science would not be possible without you! The story of 2017 once again shows that while success is measurable in numbers, what isn't as quantifiable is the lasting impact the Museum has on the people in our community.



Throughout history, the enduring spirit of human curiosity has kept us moving forward. But how people connect with the world today is unique to our time and is constantly changing, greatly influencing the role museums play in our society. We believe that igniting the imaginations of youth and adults will catalyze the next generation of explorers, problem solvers, creative strategists, and analytical thinkers. We are also aware that an afternoon at the Museum can simply be an entertaining and relaxing way to spend time, so every experience is significant.

In recent years, we have enjoyed building new relationships in our community and really listening to what role people want the Museum to play in their lives. These conversations have shaped our commitment to providing more and diverse people with opportunities to connect with nature and science in ways that are meaningful to them. Our community is inspiring us every day as we plan for the future.

The Museum is moving forward with initiatives related to experiences both at 2001 Colorado Boulevard and where people live, work, play, and learn. We are in the early stages of transforming the experience on the first floor into innovative, personalized ways for our guests to pursue their own discoveries about science, our natural world, and what lies beyond our planet. In 2017, the Board of Trustees approved plans for the first major project, "Space Odyssey Reimagined." The community has already offered incredible insights on the existing gallery and dreamed with us as we design a renewed experience as captivating as space itself, scheduled to launch in 2019.

Outside our walls, we are revitalizing how the Museum engages with Colorado's schools, neighborhoods, and towns. Refreshed offsite science education was the first step, kicking off with new At Your School programs in late 2017, which were intentionally co-created alongside





teachers and students to support and enhance what's going on in today's classrooms. The next phase for offsite experiences is underway and poised to be a particularly exciting opportunity, as again we collaborate with our partners to create lasting meaning for them. Stay tuned for more!

In the following pages, you will see some examples of how the Museum was privileged to serve more than 1.8 million people in 2017. We are grateful to you for investing in the Museum, so that together we can deliver great science, inspire curiosity, and cultivate relationships in ways both easy to measure and impossible to imagine.

George Sparks
President and CEO

Monty Church

Montgomery Cleworth Chairman of the Board

MISSION

Be a catalyst! Ignite our community's passion for nature and science.

VISION

An empowered community that loves, understands, and protects our natural world.

FACING PAGE:

George Sparks (left) and Monty Cleworth at the Magic Mountain site.

ABOVE

The Museum and CBS4 presented Girls & Science in 2017, sponsored by Stantec. Career Mentors devoted the day to inspiring girls to explore STEAM fields. More than 9,500 girls and their families enjoyed the event.

ON THE COVER:

A boy from metro Denver shows off his discovery: a stone projectile point from the Magic Mountain archaeological site, near Golden, Colorado. The Museum is newly exploring this important site, and the community is helping us! Learn more on page 18.



DENVER MUSEUM OF NATURE & SCIENCE

TOGETHER WITH YOU, WE SHARE NEW DISCOVERIES WITH THE WORLD, PRESERVE SCIENTIFIC TREASURES THAT PIQUE CURIOSITIES, AND OPEN EYES AND MINDS TO THE WONDERS OF NATURE AND SCIENCE.

TREASURER'S REPORT

2017

The Denver Museum of Nature & Science is pleased to report another successful year. In 2017, the Museum achieved operating revenues of \$38,410,313, exceeding our plan due to well-performing temporary exhibitions, successful fundraising efforts, and a sustained high number of membership households.

We owe special recognition to the citizens of the seven-county metro region, the City and County of Denver, and the Scientific & Cultural Facilities District (SCFD) for their ongoing operational support. Thanks to a stable and growing economy, SCFD revenue increased 3.9 percent in 2017 from the previous year.

The Museum continued in 2017 with important capital projects that enabled the Museum to handle increased attendance and improve the visitor experience. Projects included purchasing a second rooftop solar array, replacing the carpet in older parts of the building, and making improvements to the parking garage and the HVAC and life-safety systems. With these planned projects, the year ended with an operating surplus of \$1,636,000.

In addition to these capital maintenance investments, the Museum completed work in 2017 on several initiative projects in the "Everyone, Everywhere" strategic plan, including construction of the new Volunteer Engagement Center and the rollout of the new At Your School educational experiences. Our financial results are presented with these strategic activities detailed separately.

The Museum received a clean audit opinion from our independent accounting firm.

Edward D. Scholz

Vice President.

Finance and Business Operations

Edward D. Scholz

Harold R. Logan/Jr.

Chair, Finance and Audit Committee

STATEMENT OF ACTIVITIES

Year ending December 31, 2017 (in thousands)

SUPPORT AND REVENUE

	Operations	Initiatives	All Museum
Admissions	9,867	-	9,867
SCFD	9,424	-	9,424
Gifts & grants	8,037	3,585	11,622
Memberships	5,622	-	5,622
Gift shop & food service (net)	1,770	-	1,770
City & County of Denver	1,636	-	1,636
Program	1,571	-	1,571
Other	483	-	483
TOTAL	38,410	3,585	41,995

EXPENDITURES

PROGRAM ACTIVITIES

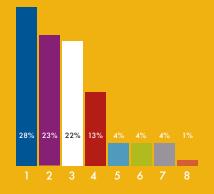
6,401	161	6,562
6,323	3,349	9,672
5,291	511	5,802
4,976	564	5,540
3,153	-	3,153
26,144	4,585	30,729
	6,323 5,291 4,976 3,153	6,323 3,349 5,291 511 4,976 564 3,153 -

SUPPORTING ACTIVITIES

General/Administration	4,777	241	5,0
Fundraising	2,271	-	2,2
Marketing	2,126	-	2,12
Membership	1,456	-	1,43
TOTAL	10,630	241	10,8
Distributions to			
DMNS Foundation	-	-	
TOTAL expenditures	36,774	4,826	41,60
Change in net assets from operations*	1,636	(1,241)	39

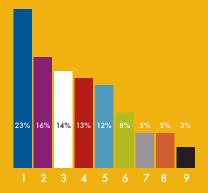
^{*}Excludes DMNS Foundation operating results

2017 SUPPORT AND REVENUE (ALL MUSEUM)



- 1) GIFTS & GRANTS
- 2) admissions
- 3) SCFD
- 4) MEMBERSHIPS
- 5) GIFT SHOP & FOOD SERVICE
- 6) CITY & COUNTY OF DENVER
- 7) PROGRAM
- 8) OTHE

2017 EXPENDITURES (ALL MUSEUM)



- 1) PHYSICAL PLANT
- 2) EXHIBITS/VISITOR EXPERIENCE
- 3) COLLECTIONS & RESEARCH
- 4) EDUCATION
- 5) GENERAL/ADMINISTRATION
- ALADMISSIONS
- 7) FIINIDD AIGING
- 8) MARKETING
- 9) MEMBERSHIP



WITH YOUR SUPPORT, THE MUSEUM CAN PURSUE NEW DISCOVERIES AND CONDUCT MEANINGFUL SCIENCE THAT CONTINUES TO WRITE THE STORY OF OUR PLANET—PAST, PRESENT, AND FUTURE.



What does it take to turn a bunch of bones into a scientific marvel? Sharp-eyed construction workers, fast-acting scientists and field crews, civic leaders, and you! An unexpected opportunity came up in August 2017 when the Museum received a call from a construction site. A bulldozer had overturned something, and they thought we'd better take a look. Dr. Joe Sertich, curator of dinosaurs, quickly made his way north and confirmed that a dinosaur fossil had reached the light of day.

Thanks to the support of Saunders Construction, the City of Thornton, and the State of Colorado, more than 80 percent of the skull and about 15 percent of the skeleton was excavated in a very short time. At Brantner Elementary School, right across the street, Dr. Sertich shared the science with the students, and the school held a contest to name the dinosaur "Tiny." Hundreds of thousands of people experienced the discovery through Facebook Live and Scientists in Action broadcasts, and a CBS4 television special, available at cbsdenver.com/torosaurus.

The fossil was originally determined to be a *Triceratops*. After careful cleaning and examination it was reidentified as a more rare *Torosaurus*. The two animals are nearly indistinguishable because they had similar horns and a frill. However, *Torosaurus* had a longer, thinner, more delicate frill, features revealed in the Museum lab. This fossil is the most complete *Torosaurus* found and will help piece together what our state was like 66 million years ago.



he "best Navajo textile collection you've never heard of" is finally getting its due. After confirming the excellence of the Museum's collection, textile specialist Laurie Webster teamed up with colleague Louise Stiver and expert Navajo weavers D. Y. Begay and Lynda Teller Pete to analyze 130 weavings from the 380-piece collection. The research from their special collaboration, accompanied by beautiful color photographs, was published in 2017 in the book Navajo Textiles: The Crane Collection at the Denver Museum of Nature & Science (University Press of Colorado), creating an enduring record of these special objects.

"THESE FOSSILS CAN BE USED TO INSPIRE FUTURE SCIENTISTS AND LEAD TO SIGNIFICANT SCIENTIFIC RESEARCH ON DINOSAUR GROWTH AND BEHAVIOR."

–John Hankla, explaining why his family donated one of the largest known collections of dinosaur fossils preserved in bone beds to the Museum in 2017. The 6,000 Edmontosaurus bones represent individuals of all ages and sizes, a significant snapshot in time from 67 million years ago.





WITH YOUR SUPPORT, YOUNG PEOPLE ACROSS OUR STATE AND BEYOND SEE SCIENCE AS AN EVERYDAY PART OF THEIR LIVES ... AND IMAGINE IT AS AN EVERYDAY PART OF THEIR FUTURE.



where that energy may take her. This enthusiasm and confidence is what Museum staff were hoping for when they created six new programs for Colorado schools. Staff devoted hours to listening to teachers, administrators, and students share their hopes and dreams for impactful learning that would leverage the power of informal education and the Museum's unique assets.

Teachers asked the Museum to offer an experience they couldn't provide themselves that would support development of real-world skills, such as perseverance, collaboration, communication, and critical thinking. Students said they wanted to work in teams in creative and thoughtful ways, explore their personal interests, and be a part of something greater than a one-time classroom lesson.

The result is brand-new At Your School experiences, combining inspiration from the educational community with the Museum's unique expertise and resources. Introduced in fall 2017, teachers choose the option that makes sense for their classroom needs. Facilitated by Us, led by professional Museum educators, transforms classrooms and takes students on a journey of exploration and discovery. Delivered to You activity boxes arrive right at the classroom door with everything the teacher needs to guide students through hands-on challenges as they explore science and the natural world.

With these unique opportunities to do "real science," kids are taking risks together, building personal connections to nature and science, and imagining endless possibilities.



or six years, Urban Advantage (UA) Denver positively impacted science achievement and reduced opportunity gaps as 14,439 seventh-graders in underserved schools experienced science in engaging and personal ways. Thanks to a new grant in 2017 from Carnegie Corporation of New York, the program has been expanded to reach sixth, seventh, and eighth graders. The partnership between the Museum, Denver Botanic Gardens, and Denver Zoo gives teachers, students, and families from Denver Public Schools a boost in science teaching and learning. Unique access to the cultural institutions and their resources open the students' eyes to nature and science, as well as their own potential, as they conduct self-selected projects that give them an opportunity to explore something they are truly curious about. By involving a student's entire support system, these future leaders see a wonder-filled future ahead.

"I LOVED MY EXPERIENCE THAT
TEEN SCIENCE SCHOLARS GAVE
ME. I GOT TO WORK WITH
PEERS MY OWN AGE AND
SCIENTISTS WHO HAVE THE
SAME CAREER THAT I WANT
TO HAVE. THIS SUMMER GAVE
ME A TASTE OF WHAT I'M
WORKING HARD TO ACHIEVE IN
THE DISTANT FUTURE. ALSO,
IT OPENED MY EYES TO OTHER
AREAS THAT I MIGHT WANT TO
GIVE ATTENTION TO."

-Khalil Flowers, one of 28 teens from the 2017 class of Teen Science Scholars. Thanks to generous donors, the program offers paid internships to students from demographic groups underrepresented in the sciences. For 11 years, nearly 200 teens have had the opportunity to work alongside Museum professionals and see firsthand how they have the potential to make an impact by pursuing a career in a STEM field





WITH YOUR SUPPORT, OUR COMMUNITY IS ENGAGED IN REAL SCIENCE THAT BUILDS PERSONAL CONNECTIONS AND INSPIRES PEOPLE TO MAKE THEIR OWN DISCOVERIES ABOUT OUR AMAZING WORLD.



Nestled in the foothills near Golden, Magic Mountain is considered one of the most significant archaeological sites along Colorado's Front Range. Prior to 2017, portions of the site had been excavated twice, but it still holds many secrets. The earliest artifacts unearthed date to 5000 BCE, when hunter-gatherers camped in the area. Evidence indicates that the site may have been inhabited until at least 1000 CE. The Museum houses artifacts from one of the excavations, such as stone tools, bones, and grinding stones for processing food.

In summer 2017, the Museum launched an unusual way to give the site renewed scientific attention by actively engaging the community. Under the leadership of Dr. Michele Koons, curator of archaeology, excavation efforts focused on areas of interest identified in geophysical surveys. During fieldwork, the public was invited to visit the site to see or participate in science in action. Nearly 950 people took advantage of the opportunity, and 52 volunteers from local scientific organizations dedicated 1,430 hours to the project as tour guides and excavators.

In partnership with TEENS, Inc., and Boys & Girls Clubs of Metro Denver, 36 youths tried their hand at excavation, with some making real discoveries! In 2018, the site will open again, with increased capacity thanks to a new grant from the History Colorado State Historical Fund. The community is directly involved in expanding our knowledge about the cultural heritage and history right in our own beloved backyard.



t is not every day that job training includes trying on chain mail, spinning socks and mittens, and wielding a sword without hurting anyone, including yourself! The Museum's dynamic historical enactors go through weeks of preparation before making their public debut. In Vikings: Beyond the Legendpresented in 2017 with major support from Icelandair-the enactors inspired guests to imagine stepping back in time. The Museum Programs and Exhibits teams collaborate on each temporary exhibition to create ways to enhance the experience. For Nature's Amazing Machines, presented with major support from Colorado State University, birds from the research collections "flew" through the gallery and kids collected fact-filled trading cards. In Ultimate Dinosaurs, staff created a simulated laboratory where all ages tried their hand at fossil preparation techniques. The Museum's special touch created even more wonder for the 648,000 guests who enjoyed these exhibitions.

"BEING A VOLUNTEER AT THE GENETICS OF TASTE LAB IS AN EXPERIENCE THAT CONTRIBUTES TO THE STRENGTHENING OF MY LEADERSHIP ABILITIES IN ORDER FOR ME TO BETTER THIS WORLD'S FUTURE."

-Edith Huizar, a high school senior explaining the impact of being selected as a High School Comunidad Scientist. The program reaches out to Denver communities to increase Latino and African American student participation in real science in the Museum's Genetics of Taste Lab. In 2017, nine teens joined the lab team, where they collaborate with other citizen scientists and do genetics analysis for the latest taste research, the Savory and Sour Study. This would not have been possible without our Community Advisory Board, who are inspiring a new generation of teens. A generous grant from the Science Education Partnership Award program at the National Institutes of Health is supporting these efforts to engage more diverse members of our community in research and citizen science.

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The Board of Trustees in the geology collections area in the Avenir Collections Center. Back row, from left: Steve Halstedt, Hal Logan, Leo Tilman, Ray Thomasson, Peter Dea, Monty Cleworth, Matthew Burkett, Tim Ryan, Henry Gordon, Wayne Hutchens, Mark Sexton, Buz Koelbel. Front row, from left: Happy Haynes, Christine Marquez-Hudson, Chris Chavez, Lisa Levin Appel, Ed Warner, Kristin Richardson, Jena Hausmann, Susan McIntire.

THANK YOU! THE MUSEUM EXPRESSES ITS DEEPEST GRATITUDE TO THE INDIVIDUAL DONORS, MEMBERS, FOUNDATIONS, GOVERNMENT AGENCIES, CORPORATIONS, AND BUSINESSES FOR THEIR SUPPORT IN 2017.

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2017

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Lance Martin

A \$300,000 grant awarded by the National Endowment for the Humanities in 2017 will sustainably preserve 72,000 objects in the archaeology collections, including artifacts from important regional sites, such as Folsom, Dent, Jones-Miller, and Magic Mountain.

Above: A shell bead (A900.448) from the Lindenmeier site near Fort Collins.

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Museum After Dark 2017 raised over \$660,000 to ensure that children in our community have access to world-class science opportunities. Thank you to event co-chairs (from left) Hal and Ann Logan, Priya and Matthew Burkett, and Becky and Chuck Morris.



The Young Professionals danced the night away with their friends at the After Dark Soiree and raised funds to support science education.

CH2M now lacobs

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Jane Pahl (center), co-chair of the Young Professionals (YP) Committee, is pictured with Amanda Raker Kimmelman (left) and Sarah Carpenter at Science on Tap, a very popular annual YP event. The YPs are actively engaged with the Museum, raising funds, awareness, and enthusiasm for nature and science in a social, engaging, and fun way.



Harriet and Paul Rosen (pictured right), whose support established Teen Science Scholars in 2007, received the annual Giving Club Special Recognition Award for 2017. They are pictured with President and CEO George Sparks and Giving Club Council chair Lisa Levin Appel.

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Paleontologist Dr. Tyler Lyson named a new prehistoric turtle *Lutemys warreni* in honor of David Warren, to recognize his longtime support of the Museum's paleontology research. Mr. Warren, pictured with the shell of his namesake, has volunteered for 23 years, preparing fossils in the Fossil Prep Labs and participating in field expeditions.

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^{*}These individuals passed away in 2017.



The new Volunteer Engagement Center opened in December as a special place for 1,722 dedicated volunteers who gave 227,875 hours to the Museum in 2017. Thank you to more than 400 donors who helped make this project possible! Together with the \$500,000 incentive fund established by Trustees Ed Warner and John Freyer, more than \$1 million was raised to create a new home in the heart of the Museum for our amazing volunteers.

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In 2017, the 38,000th arachnology record entered the database. When curator of arachnology Dr. Paula Cushing arrived 20 years ago, there were zero records. She established the Colorado Spider Survey, engaging citizen scientists in collecting these fascinating creatures. Together with their volunteer efforts, Dr. Cushing's own collecting prowess, and donations from retired arachnologists, this comprehensive collection is now available to researchers around the world via the internet at scan-bugs.org.

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